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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/721,657	11/25/2003	Siddhartha Panda	FIS920030133US1 (175P012)	7420
28264	7590	02/18/2009	EXAMINER	
BOND, SCHOENECK & KING, PLLC ONE LINCOLN CENTER SYRACUSE, NY 13202-1355			VINH, LAN	
			ART UNIT	PAPER NUMBER
			1792	
			NOTIFICATION DATE	DELIVERY MODE
			02/18/2009	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

bskpto@bsk.com  
gmcguire@bsk.com  
dnocilly@bsk.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/721,657	<b>Applicant(s)</b> PANDA ET AL.	
	<b>Examiner</b> LAN VINH	<b>Art Unit</b> 1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 09 January 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 11-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 11-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/9/2009 has been entered.

### ***Response to Arguments***

2. Applicant's arguments filed 1/9/2009 have been fully considered but they are not persuasive.

The applicants argue that the cited reference of Anthony does not explicitly say that the ring shaped layer 126 transmits any of the infrared radiation incident upon it from radiation source 128 because Anthony says that the ring shaped layer absorbs the infrared radiation incident upon it and re-radiates (at least a portion of) it into the outer peripheral portions of wafer 110 lying directly beneath ( Figure 5 ). This argument is unpersuasive because it is noted that section 2111 of the MPEP states that " Claim Interpretation; Broadest Reasonable Interpretation

### **CLAIMS MUST BE GIVEN THEIR BROADEST REASONABLE INTERPRETATION**

During patent examination, the pending claims must be "given their broadest reasonable

Art Unit: 1792

interpretation consistent with the specification.” >The Federal Circuit’s en banc decision in *Phillips v. AWH Corp.*, 415 F.3d 1303, 75 USPQ2d 1321 (Fed. Cir. 2005) expressly recognized that the USPTO employs the “broadest reasonable interpretation” standard” and section 2125 states: “Drawings as Prior Art

#### DRAWINGS CAN BE USED AS PRIOR ART

Drawings and pictures can anticipate claims if they clearly show the structure which is claimed. In *re Mraz*, 455 F.2d 1069, 173 USPQ 25 (CCPA 1972)”. Paragraph 0031 of the instant application discloses the central and peripheral regions having high and low transmittance referring to fig. 6 that shows the infrared radiation passing through/transmitting through the regions of the filter 50. Since fig. 5 of Anthony also shows the infrared radiation 132 passing through the central region 124 and peripheral region 126 of the structure 110 which is similar to what being shown in fig. 6 of the instant specification, it is maintained that Anthony discloses a first region comprising a material having a first non-zero transmittance with respect to infrared wavelength(s) suitable for use in the plasma etching process; and a second region comprising a material having second non-zero transmittance as required in claim 11

The applicants also argue that Anthony doesn't teach or suggest that its ring shaped layer 126 is suitable for use in a plasma etching process and there is no reason to believe that it would be based on the teachings of Anthony. This argument is unpersuasive because it is noted that the recitations of "suitable for use in the plasma etching process" is considered as a functional/intended use claim language that is not given patentable weight in these apparatus claim. The apparatus/ring taught by Anthony

Art Unit: 1792

would be structurally capable of performing the claimed intended use. It has been held that claims directed to apparatus must be distinguished from the prior art in terms of structure rather than function. In re Danly, 263 F.2d 844,847, 120 USPQ 528,531 (CCPA 1959). Also, a claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim. Ex parte Masham, 2 USPQ2d 1647 (Bd. Pat. App. & Inter. 1987)

It is argued that fig. 5 of Anthony discloses only a single region comprising a single material, and it does not include "a second region comprising a material." as required by amended claim 11. This argument is unpersuasive because the structure 110 of Anthony shows a first region 126/comprising a material having a first non-zero transmittance and a second/central region of structure 110 comprising a material\_having second non-zero transmittance

In response to the argument that Anthony does not disclose "a plurality of transmission regions, with said transmission regions of said plurality of transmission regions being respectively characterized by a metallic coating having different respective thicknesses and varying degrees of transmittance with respect to the infrared wavelength(s)". Fig 5 , Table II and col 10, lines 65-67 of Anthony is relied upon to shows a plurality of peripheral and center transmission regions, with said transmission regions of said plurality of transmission regions being respectively characterized by a aluminum alloy/metallic coating 116 having different respective thicknesses and varying degrees of transmittance

Art Unit: 1792

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 17 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 17 recites the limitation "said layer of metallic coating" in claim 11. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 11-14, 15, 18, 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Anthony et al (US 4,135,027)

Anthony discloses a body/structure 110/a filter, the structure comprise the perimeter region 126(eccentric shaped)/first region comprising a material having a first non-zero transmittance with respect to infrared wavelength(s) 132 emitted from radiation source 128 (IR lamp), a center portion of body 110 (eccentric shaped)/second region comprising a material having second non-zero transmittance with respect to infrared

wavelength(s) that is different than the first transmittance, wherein said first transmittance is lower than said second transmittance (col 7, lines 3-60; figs. 4-5)

FIG. 4

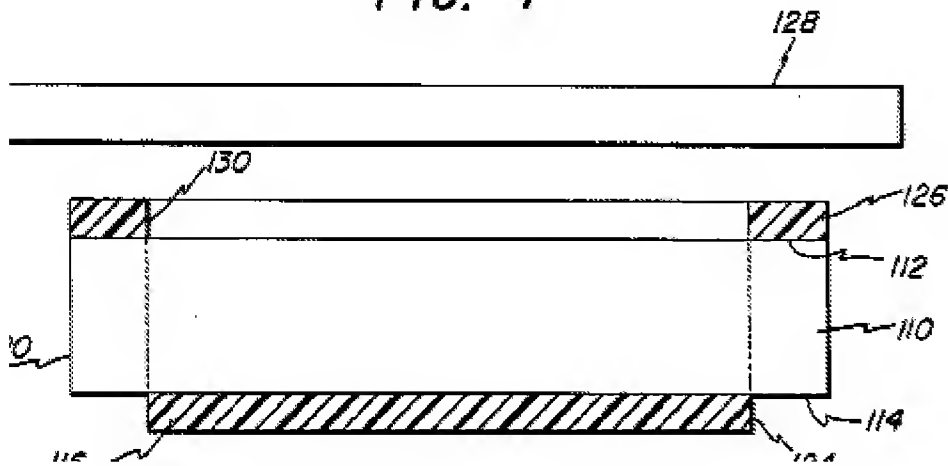
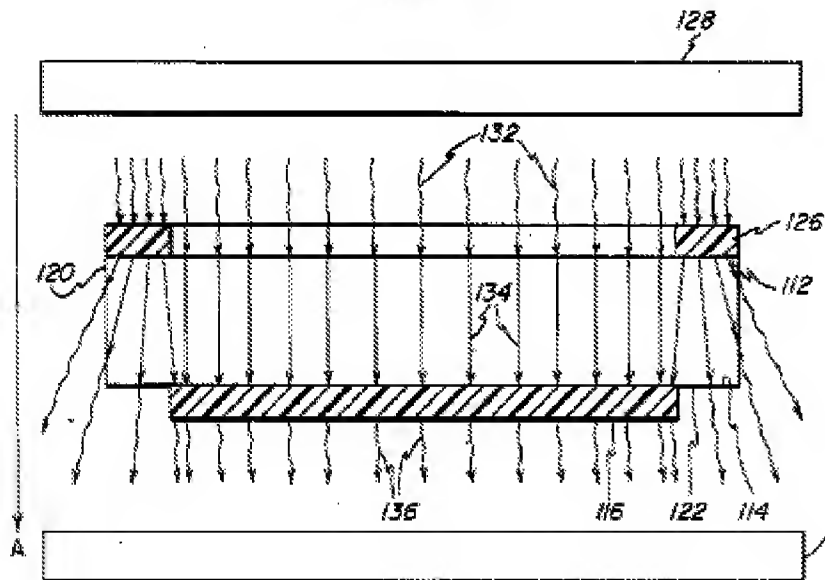


FIG. 5



Art Unit: 1792

Regarding claims 11, 15, 18, 19, the recitations of "suitable for use in the plasma etching process", "to compensate for spatial etch distortions in the plasma etching process", "is positioned to reduce transmission in areas where said plasma etching process experience magnetic field cusping" and "further adapted to select for a resonant frequency of infrared radiation" are considered as a functional/intended use claim language that is not given patentable weight in these apparatus claims. The apparatus/ring taught by Anthony would be structurally capable of performing the claimed intended use. It has been held that claims directed to apparatus must be distinguished from the prior art in terms of structure rather than function. In re Danly, 263 F.2d 844,847, 120 USPQ 528,531 (CCPA 1959). Also, a claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim. Ex parte Masham, 2 USPQ2d 1647 (Bd. Pat. App. & Inter. 1987)

5. Claim 20 is rejected under 35 U.S.C. 102(b) as being anticipated by Anthony et al (US 4,135,027)

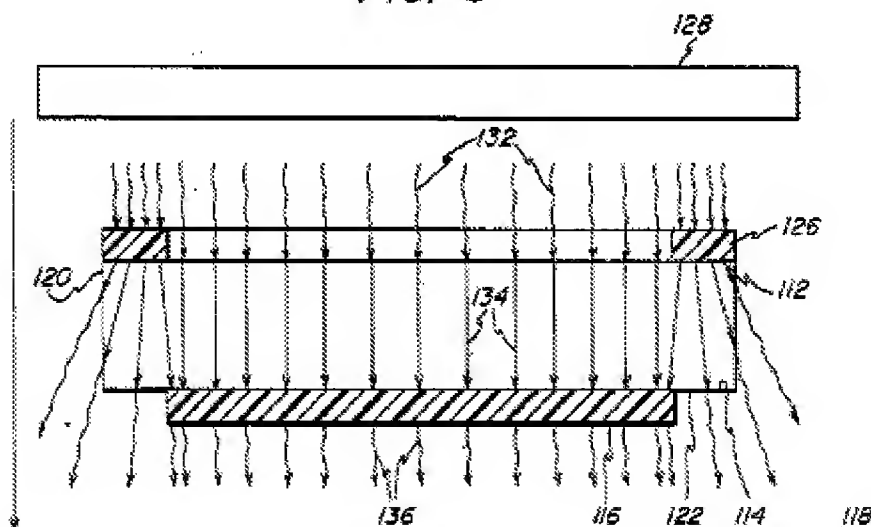
Anthony discloses a semiconductor element embodying an optical coating comprises a front surface of guard ring 126/first surface adapted to receive and transmit infrared radiation having wavelength(s) 132 emitted from radiation source 128 ( col 7, lines 3-60; fig. 5)

a structure 110/filtering structure having an area located to receive and transmit the



Art Unit: 1792

infrared radiation through said first surface, with the filtering structure being characterized by a plurality of transmission regions (perimeter and center regions), with said transmission regions of said plurality of transmission regions being characterized by an aluminum alloy/metallic coating 116 having different respective thicknesses and varying degrees of transmittance varying degrees of transmittance (more radiation 132 are passed through the center portion/region of the structure 110) with respect to the infrared wavelength(s) ( col 5, lines 30-35, col 8, lines 60-65; col 10, lines 65-68; fig. 5), and with said transmission regions of said plurality of transmission regions being distributed over said area

**FIG. 5**

It is noted that the recitations of "suitable for use in the plasma etching process", "so that they mirror spatial etch distortions that would occur in the plasma etching process absent the selective transmission of infrared radiation by said filtering structure" are considered as a functional/intended use claim language that is not given patentable weight in these apparatus claims. It has been held that claims directed to apparatus

Art Unit: 1792

must be distinguished from the prior art in terms of structure rather than function. In re Danly, 263 F.2d 844,847, 120 USPQ 528,531 (CCPA 1959). Also, a claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim. Ex parte Masham, 2 USPQ2d 1647 (Bd. Pat. App. & Inter. 1987)

6. Claim 21 is rejected under 35 U.S.C. 102(b) as being anticipated by Anthony et al (US 4,135,027)

Anthony discloses an apparatus comprises:

an infrared radiation source 128 adapted to emit infrared radiation having infrared wavelength(s) (col 7, lines 10-15, 55-60)

a heat sink 118/chip holder (fig. 5), which reads on a wafer chuck

a structure to absorb infrared radiation/ infrared filter located between the infrared source and a wafer position in a path of the emitted infrared radiation, the structure/filter comprising:

a first region 116/comprising a material having a first non-zero transmittance with respect to the emitted infrared wavelength(s)

a second region 126/comprising a material having second non-zero transmittance with respect to the emitted infrared wavelength(s) that is less than said first non-zero transmittance with respect to the emitted infrared wavelength(s).

It is noted that the recitations of "suitable for use in the plasma etching process",

Art Unit: 1792

"adapted to secure the wafer at a wafer position" are considered as a functional/intended use claim language that is not given patentable weight in these apparatus claims. The heat sink 118 taught by Anthony would be structurally capable of securing the wafer at a wafer position. It has been held that claims directed to apparatus must be distinguished from the prior art in terms of structure rather than function. In re Danly, 263 F.2d 844,847, 120 USPQ 528,531 (CCPA 1959). Also, a claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim. Ex parte Masham, 2 USPQ2d 1647 (Bd. Pat. App. & Inter. 1987)

### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 16-17 rejected under 35 U.S.C. 103(a) as being unpatentable over Anthony et al (US 4,135,027) in view of Mathies et al (US 6,867,420)

Anthony guard ring/filter has been described above. Although Anthony discloses that the structure 110 having an aluminum alloy/metallic coating 116 having different respective thicknesses, Anthony fails to disclose that the structure/filter comprises optical quality glass as required in claim 16

Art Unit: 1792

Mathies discloses an optical system comprises a metallic coating having a thickness on a glass substrate (col 4, lines 45-55; fig. 4)

Ones skilled in the art would have found it obvious to modify Anthony structure by forming a metallic coating of a predetermined thickness on a optical quality glass to minimize effect of laser scattered light and increase the efficiency of transmission of the light taught by Mathies (col 4, lines 19-50)

### ***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to LAN VINH whose telephone number is (571)272-1471. The examiner can normally be reached on M-F 8:30-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nadine Norton can be reached on 571 272 1465. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1792

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Lan Vinh/  
Primary Examiner, Art Unit 1792